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REMARKS

Applicants appreciate the Examiner's thorough consideration provided in the present application. Claims 1-18 are currently pending in the instant application. Claims 1-3 and 8 have been amended. Claims 1-3 and 8 are independent. Reconsideration of the present application is earnestly solicited.

Allowable Subject Matter

Applicants appreciate the Examiner's indication of allowable subject matter. Specifically, the subject matter of claims 2, 3, 6-11, 13-16, 17 and 18 has been indicated as being allowable if rewritten in independent format and/or to overcome the informalities cited by the Examiner. Without conceding the propriety of the Examiner's rejections, but merely to expedite the prosecution of the present application, Applicants have amended claims 2, 3 and 8 into allowable, independent format. Accordingly, as indicated by the Examiner, claims 2-11 and 13-18 should be allowed. In addition, as described in greater detail hereinafter, Applicants submit that all of the claims should be allowed and the present application should be passed to Issue.

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Information Disclosure Statement

Applicants appreciate the Examiner's indication of the receipt and

consideration of the Information Disclosure Statements filed on June 31, 2004.

Priority

Applicants appreciate the Examiner's indication of acceptance of the

certified copy of the corresponding priority document for the present

application.

Drawings

Applicants would appreciate the Examiner's assistance with respect to

the drawings. Since Applicants have not been provided with a PTO-948 (Notice

of Draftperson's Patent Drawing Review), Applicants submit that it appears

that the formal drawings filed on September 10, 2003 have been approved by

the Examiner. The Examiner is requested to contact the undersigned via

telephone in the Washington, DC area if any issues remain with respect to the

drawings after entry and consideration of this response.

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Minor Informalities/Claim Rejections Under 35 U.S.C. § 112

Claims 4-11, 15 and 18 have been rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite due to the presence of minor informalities with claim 4. This rejection is respectfully traversed.

Applicants respectfully submit that the Examiner's requested amendment to claim 4 appears to be improper. Specifically, the rocker arm (element 44), rocker arm shaft (element 46) and rocker arm shaft holder (element 56) are properly claimed in claims 4-11, 15 and 18 and are fully supported by the original written description, e.g., including, but not limited to paragraphs 0032-0040 and FIGs. 3-6. Accordingly, this rejection is improper and should be withdrawn. The Examiner is requested to contact the undersigned via telephone if this rejection is maintained in any form responsive to the entry and consideration of this amendment to clarify the Examiner's position with respect to term rocker arm shaft (46).

Claim Rejection Under 35 U.S.C. § 102

Claims 1 and 2 have been rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Thompson (U.S. Patent No. 3,400,696). This rejection is respectfully traversed.

In light of the foregoing amendments to the claims, Applicants respectfully submits that all of the rejections have been obviated and/or

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rendered moot. Without conceding the propriety of the Examiner's rejection,

but merely to expedite the prosecution of the present application, Applicants

have amended claim 1 to clarify the relationship between the two described

joints for the benefit of the Examiner. However, Applicants submit that these

non-narrowing amendments have not been made responsive to a proper

statutory rejection advanced by the Examiner. Accordingly, this rejection

should be withdrawn.

With respect to claim 1, the prior art of record fails to teach or suggest

the combination of limitations of the claimed invention, including the feature(s)

of: "a joint being formed between the cylinder head and cylinder block, wherein

the joint between the cylinder head and the cylinder block extends diagonally

with respect to either the longitudinal axes of the intake valve or the longitudinal

axis of the exhaust valve." (Emphasis Added) Accordingly, this rejection

should be withdrawn.

With respect to the Thompson reference, particularly FIG. 1 that shows

the entirety of the Thompson valve train, Applicants submit that although

Thompson appears to suggest a joint being formed between a cylinder head

and the cylinder head cover (the two halves labeled 10 in FIG. 1 are the upper

and lower halves of the engine head 10 described by Thompson) which is

perpendicular to the axis of the valve 12, this reference does not teach or

suggest any joint between the cylinder head and the cylinder block.

Accordingly, Thompson cannot be considered to teach or suggest the feature of a "joint between the cylinder head and the cylinder block that extends diagonally with respect to either the longitudinal axes of the intake valve or the longitudinal axis of the exhaust valve." Applicants submit that it appears the only joint shown or described in connection with FIG. 1 is the diagonally shaped joint extending at an angle downward (from left to right) just below the rocker arm 16 shown in FIG. 1. Accordingly, this rejection should be withdrawn.

Applicants respectfully request that the Examiner identify the alleged second joint (between the cylinder head and the cylinder block) of the Thompson reference in greater detail if this rejection is maintained in any form responsive to this Amendment.

Claim Rejection Under 35 U.S.C. § 103

Claims 1 and 2 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Thompson (U.S. Patent No. 3,400,696) in view of Official Notice. Claims 4 and 5 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Thompson (U.S. Patent No. 3,400,696) in view of Nomura et al. (U.S. Patent No. 6,453,861). These rejections are respectfully traversed.

As described in greater detail hereinabove, Applicants submit that Thompson fails to teach or suggest each and every limitation of the unique combination of limitations of original claim 1. Accordingly, this rejection is

improper and should be withdrawn.

In accordance with the above discussion of the patents relied upon by the Examiner, Applicants respectfully submit that these documents, either in combination together or standing alone, fail to teach or suggest the invention

as is set forth by the claims of the instant application.

As to the dependent claims, Applicants respectfully submit that these claims are allowable due to their dependence upon an allowable independent claim, as well as for additional limitations provided by these claims.

CONCLUSION

Since the remaining references cited by the Examiner have not been utilized to reject the claims, but merely to show the state-of-the-art, no further comments are deemed necessary with respect thereto.

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

Amendment dated December 21, 2004 Response to Office Action of September 20, 2004 Docket No. 0505-1244P Appl. No.: 10/658,263

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In the event there are any matters remaining in this application, the

Examiner is invited to contact Matthew T. Shanley, Registration No. 47,074 at

(703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent,

and future replies, to charge payment or credit any overpayment to Deposit

Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or

1.17; particularly, extension of time fees.

Respectfully submitted,

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Bv:

JMS/MTS/mlr

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